

Customer No.: 31561  
Application No.: 10/707,704  
Docket No.: 11964-US-PA

AMENDMENT

Please amend the application as indicated hereafter.

In the Claims :

**1-8 (cancelled).**

**9. (original) A non-volatile memory device, comprising:**

**a substrate, wherein the substrate has a trench;**

**a gate disposed over and completely filling the trench;**

**a bottom oxide layer disposed between the gate and the trench surface;**

**a charge-trapping layer disposed between the gate and the bottom oxide layer;**

**a top oxide layer disposed between the gate and the charge-trapping layer; and**

**a plurality of source/drain regions configured in the substrate outside the gate.**

**10. (original) The non-volatile memory device of claim 9, wherein the gate extends over a portion of the substrate outside the trench.**

**11. (original) The non-volatile memory device of claim 10, wherein bottom oxide layer is disposed between the gate and the substrate.**

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**12. (original) The non-volatile memory device of claim 9, wherein the device further comprises a plurality of spacers located on the sidewalls of the gate.**

**13. (original)The non-volatile memory device of claim 12, wherein the device further comprises a plurality of lightly doped regions located in the substrate underneath the spacers.**

**14. (original)The non-volatile memory device of claim 12, wherein material constituting the spacers comprises silicon nitride.**

**15. (original) The non-volatile memory device of claim 9, wherein material constituting the gate comprises polysilicon.**

**16. (original)The non-volatile memory device of claim 9, wherein material constituting the charge-trapping layer is selected from the group consisting of a nitride compound, tantalum oxide, titanic strontium and hafnium oxide.**

**17. (original) The non-volatile memory device of claim 9, wherein the device further comprises a silicide layer disposed on the gate surface.**

**18. (original)The non-volatile memory device of claim 17, wherein material**

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**constituting the metal silicide layer is selected from the group consisting of cobalt silicide, titanium silicide, tungsten silicide, molybdenum silicide, platinum silicide and nickel silicide.**